

ON SOME NEW OR UNFIGURED LEPIDOPTERA FROM THE
ORIENTAL AND ETHIOPIAN REGIONS.

By KARL JORDAN.

(With Plates III and IV.)

1. ***Delias itamputi luctuosa*** Jord. 1912 (Pl. III, figs. 7, 8).

♂. *D. i. l.* Jordan, *Nov. Zool.*, xviii, p. 584, no. 4 (1912) (Mt. Groome, 11,000 ft.).

The specimen, a ♂, is still the only one recorded of this subspecies, which is distinguished by the great extent of the black borders.

2. ***Charaxes tectonis*** Jord. 1937 (Pl. III, figs. 9, 10).

♂. *Ch. t.* Jordan, *l.c.*, xl, p. 323, no. 1 (1937) (Cameroon: Bamenda).

No further specimens have come to hand.

3. ***Daphnusa ocellaris ailanti*** Boisd. 1875 (Pl. IV, figs. 11 ♂, 12 ♀).

♂. *Smerinthus ailanti* Boisduval, *Spec. Gén. Lép. Hét.*, i, p. 28, no. 16, pl. 3, fig. 2 ♂ (1875).

♂. *Daphnusa ocellaris ailanti*, Rothschild & Jordan, *Revision of Sphingidae*, p. 285, no. 241b (1903).

Although Boisduval stated that his specimen had been obtained from a chrysalis found by Lorquin at the foot of *Ailanthus glandulosa* at Hongkong, the true locality is Celebes, probably the Minahassa district where Lorquin had been collecting. We have lately received several ♂♂ and a ♀ from Mr. J. P. A. Kalis, who obtained them inland from Paloe Bay, West Celebes, at various places from November 1937 to April 1938, at altitudes from 900 ft. to 3,700 ft.

As stated in the *Revision*, the distal margin of the forewing is more convex below middle than in *D. o. ocellaris* Walker 1856 and the apex of the hindwing more broadly rounded. Moreover, the tornus of the forewing projects less far backward, particularly in the ♂, and the hindwing is somewhat differently marked at the anal angle, bearing here close to the distal margin a short broadish brown continuous band.

4. ***Hippotion moorei moorei*** Jord. 1926 (Pl. IV, fig. 13 ♂).

♂. *H. m.* Jordan, *Nov. Zool.*, xxxiii, p. 383, no. 11a (1926) (Tanganyika Terr.: Mwanza).

5. ***Hippotion exclamationis robur*** subsp. nov. (Pl. IV, figs. 14, 15).

♀. Larger and more robust than *H. e. exclamationis* Fawe. 1915 from Kenya and *H. e. austrinum* Jord. 1930 from Zululand. Occiput, upperside of thorax and abdomen and the wings above and below much more shaded and irrorated with blackish olive, the base of the abdomen being particularly darker than in the other subspecies.

On *upperside* of forewing the discal dots form the proximal boundary of a diffuse olive band, which is more or less conspicuous; in one paratype (fig. 15) there is rufous scaling within this band; dots at apices of veins well-marked.—Hindwing very dark, blackish olive, the pinkish submarginal diffuse band of the other subspecies absent or vestigial.

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On *underside* the black irroration strongly developed on both wings; the transverse row of dots and the submarginal line variable on both wings; in type the apex of hindwing black, this colouring extending to apex of cell.

Length of forewing 29–31 mm., breadth 11–12 mm.

Tanganyika Territory: Banagi Hill, Musoma, 3 ♀♀ at light on April 14, 15, 18, at 7.30 and 8.30 p.m. after heavy rain. We have to thank Mr. and Mrs. M. S. Moore for this interesting discovery and for having carefully noted the time of appearance at the lamp.

6. *Hippotion rebeli* R. & J. 1903 (Pl. IV, fig. 16).

♂♀. *H. r.* Rothschild & Jordan, *Revision of Sphingidae*, p. 761, no. 715, pl. v, fig. 12 ♀ (1903) (Sudan; Obock).

Besides the two original specimens there are now several others in collections. The British Museum has received the species from S.W. Arabia, and at Tring there is a pair from Diré Daoua, Abyssinia, collected in March and May 1936 by H. Uhlenhuth, the ♂ of which we figure. The species evidently represents *H. exclamationis* in the Sudan, Abyssinia, Somaliland, and South Arabia. It is distinguished in colour from the more southern species, the body and the upperside of forewing and underside of hindwing being clayish buff, and the hindwing above and the greater part of the forewing below more or less tawny ochraceous with a slight pink tint.

7. *Hippotion butleri* Saalm. 1884 (Pl. VI, figs. 17, 18).

♀. *Panacra butleri* Saalmüller, *Lep. Madag.*, p. 118, no. 275, pl. 5, fig. 51 (1884) (Nossibé).

We have received two ♂♂ of this rare Malagassic species, of which only one specimen, a ♀, has been recorded as far as we know. The upper ♂ (fig. 17) was obtained by Monsieur R. Catala in the Forêt d'Isaka, near Fort Dauphin, Nov.–Dec. 1934; it is in good condition and shows the pale diffuse submarginal band of the forewing but faintly on the upperside. The second ♂ was collected by Monsieur and Madame d'Olsoufieff in March 1935 at Périnet, east of Tananarivo; it is somewhat worn, having lost some of the scaling of the upperside, in consequence of which the conspicuous pale submarginal band of the underside is also very distinct above. The triangular spot before the anal angle of the hindwing is less deep buff than in Saalmüller's figure and less sharply defined.

8. *Temnora grandidieri* Butl. 1879 (Pl. IV, fig. 19).

♂. *Diodosida grandidieri* Butler, *Ann. Mag. N.H.* (5), iv, p. 234 (1879) (Madagascar).

♂. *Temnora grandidieri* (Butler), Rothschild & Jordan, *Revision of Sphingidae*, p. 570, no. 495, pl. vii, fig. 8, ♂.

When we wrote the *Revision* we had seen only the 3 ♂♂ in the British Museum and the 2 ♂♂ in coll. Oberthür. The Tring collection now contains a series of 26 ♂♂ from the neighbourhood of Périnet, 140 km. east of Tananarivo, collected by M. and Mme. d'Olsoufieff in x., xi., xii., i. and ii. 1930 to 1935, and 2 ♂♂ obtained by M. R. Catala at Ankarampotsy, near Fianarantsoa, col de Tantamaly, xii.33. Among the series sent by M. d'Olsoufieff there was a single specimen of the following species. We figure a specimen of *T. grandidieri* for comparison.

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9. *Temnora engis* Jord. 1933 (Pl. IV, fig. 20).

♂. *T. e.* Jordan, *Nov. Zool.*, xxxviii, p. 342, text-figs. 58-61 (1933).

The difference from *T. grandidieri* in the shape and markings of the forewing is well shown in the photograph. The hindwing is tawny, with a rather ill-defined darker border.

10. *Ludia arida* sp. nov. (Pl. IV, fig. 21).

♂. In colouring half-way between *L. corticea* Jord. 1922 and *L. hansali* Feld. 1874, but differs much in the genitalia from these and all the other species of *Ludia*.

Body broccoli brown, upperside of thorax blackish, the pale lanceolate or spatulate hairs less numerous, less widened at apex and less contrasting in colour with the normal hairs than usually. Pronotum and base of tegulae buffish cream, nearly ecru drab, contrasting very strongly with the dark colouring of the mesonotum. Antenna with 32 segments, 16 of them quadripectinate, but the branches of the 16th quite short.

Wings, *upperside*. Forewing: submedian transverse line evenly excurved from costal margin to below cell as in *L. hansali*, then straight to hindmargin, but this posterior half slightly incurved on submedian vein; proximal area up to this line the same pale colour as collar, the pale colouring extending costally beyond the line, behind cell shaded with broccoli brown; submarginal transverse line scalloped, without the conspicuous pale band of *L. hansali* on its distal side; marginal area finely irrorated with broccoli brown; termen undulate, fringe pale between the veins; upper vitreous mark a little dilated at both ends, slightly curved, lower mark projecting distad beyond upper mark, its lower end very thin and vestigial.—Hindwing: the black area surrounding ocellus connected with costal margin by a very faintly blackish and narrower continuation of the dark area, a small subapical red patch being thereby separated from the proximal red area; marginal area as on forewing irrorated with broccoli brown; termen undulate, rounded tooth at M¹ more projecting than the others; fringe pale between veins.

Underside almost uniformly pale drab, minutely irrorated with darker scaling, costal margin of both wings with light and dark spots, which are more apparent on hindwing; submarginal line inconspicuous on both wings; red area of forewing diffuse distally and not distinctly reaching the submarginal line.

Neuration: the three subcostal veins of forewing on a long stalk, first and third branching off from second at the same point.

Genitalia: Median lobe of sternite VIII more broadly rounded than in any other species. Anal tergite divided. Clasper very broad; its ventral lobe short and pointed, apical lobe broad, rounded at apex as in *L. corticea*, with a few small teeth, measured from the sinus which separates the lower lobe the apical lobe nearly as broad as long.

Length of forewing 30 mm., width 14.5 mm.

Angola: Murro de Pundo, 60 km. north-east of Lobito, 300 m., 21 May 1934 (K. Jordan), 1 ♂.

The specimen came to the lamp after midnight.

11. *Ludia orinoptena monroei* subsp. nov. (Pl. IV, fig. 22).

♀. Antenna with 27 segments, 16 of them bipectinate, but teeth of 16th very short. Termen less rounded in both wings than in the other subspecies of

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L. orinoptena, forewing narrower, submarginal line of hindwing more parallel with termen and posteriorly a little farther away from anal angle than in ♀♀ from tropical East and West Africa, and rounded median lobe of vaginal plate less projecting. Subcostal branches of forewing on a shortish stalk, first and third branching off from second at the same point. Upper vitreous spot of forewing thin at lower end, on right wing covered with scaling.

Length of forewing 33 mm., width 16 mm.

North Transvaal: Woodbush, Pietersberg district, 25 February 1936 (E. Munroe), 1 ♀.

Named in honour of Mr. E. Monroe, who very kindly presented the specimen to me.

12. *Argyrolepidia stevensi* sp. nov. ; *Agaristidae*.

♀. Head hairy, abdomen banded with yellow and hindwing with two yellow spots, the outer one large, nearly central.

Cone of frons high, with feeble indication of rim; sides of frons white mixed with black, and bearing long hairs overhanging eye, similar hairs behind eye in border composed of white erect scaling. Antenna setiform, with a regular row of white spots on upperside. Segments I and II of palp white beneath, black at side, with long black hairs, I beneath and at upper apical angle washed with yellow, III longer than usual, as long as II, rather strongly incrassate at apex. Pronotum narrowly margined with pale yellow in front and white laterally as well as posteriorly and in middle line. Meso-metanota isabella-colour, on metanotum a pale yellow lateral tuft. Abdomen black, rather rough-hairy, regularly banded with yellow at apices of segments, at base a large black dorsal tuft, with some yellow scale-hairs at the sides, anal tuft black externally, hairs beneath this covering yellow. Breast and coxae orange-yellow, paler at side, abdomen beneath banded with orange-yellow. Legs black, femora with yellow hair on upperside, on tibiae some white scaling, especially at tip; dorsal side of spurs of mid- and hindtibiae basally more or less white; on tarsi a few white scales at apex of I and II or only on I.

Wings, *upperside*, black, with a very feeble blue tint.—Forewing: with three metallic blue, very thin, lines, one near base, second about half-way between base and lower median vein, forming a shallow arc below cell, third discal, curving basad-posticad from lower median, in cell beyond middle a grey spot shaded with brown, on disc a similarly coloured narrow band, about 2 mm. broad, well separate from cell, nearly straight from near costal margin, opposite lower angle of cell curved backwards to lower median, where it ends; fringe white at apex of wing.—Hindwing deeper black than forewing; fringe of anterior angle white; below cell close to base of lower median a pale orange spot about 1½ mm. wide, outside the cross-veins a larger spot, 5 × 7 mm., somewhat oblique, the same colour, irregularly rounded.

Underside of both wings with blue scaling at base, markings as above, but no metallic transverse lines on forewing and the cell-spot and abbreviated discal band pure white.

Length of forewing 23 mm., width 12 mm.

Papua: Morobe district, 7,000 ft., xi. 1932 and iii. 1934 (H. Stevens), 2 ♀♀.

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